



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,658	06/12/2007	Jari Vikberg	4144-7	9241
23117 7590 07/31/2009 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203				
EXAMINER				
SARWAR, BABAR				
ART UNIT		PAPER NUMBER		
2617				
MAIL DATE		DELIVERY MODE		
07/31/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/588,658

Applicant(s)

VIKBERG ET AL.

Examiner

BABAR SARWAR

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05/19/2009.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 15-21 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-7 and 15-21 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-8508)
4) ☐ Interview Summary (PTO-413)
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____
Paper No(s)/Mail Date _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to **claims 1-7, 15-21** have been considered but are moot in view of the new ground(s) of rejection.
2. **Claims 8-14** have been cancelled.
3. **Claims 1-7, 15-17** have been amended.
4. **Claims 18-21** are newly added claims.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 15-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gallagher et al. (US 2008/0119187 A1) in view of Monin et al. (US 2002/0197984 A1), hereinafter referenced as Gallagher and Monin.

Consider **claims 1, 15, 18, 21**, Gallagher discloses an access network controller (**Fig. 1 element 24, where Gallagher discloses an indoor system server**) for use in an access network (**Fig. 1 element 16, where Gallagher discloses an unlicensed mobile communication network, therefore an access network**) adapted to communicate with a mobile terminal (**Fig. 1 element 12, where Gallagher discloses a subscriber device**) and a core network portion of a public licensed mobile network (**Fig. 1 element 14, where Gallagher discloses a cellular network, therefore a core**

network), said access network controller being adapted to communicate with said core network portion over a predetermined mobile network interface (**Fig. 1 elements 14, 15, where Gallagher discloses an indoor system server and cellular core network in communication with each other**) and being connected to a plurality of access points, each defining a mini-cell (**Fig.1 element 18, where Gallagher discloses an indoor base station**), wherein said access network controller is adapted to communicate with said mobile terminal located in a respective mini-cell of an access point via an unlicensed-radio interface between said mobile terminal and said access point (**Fig. 1 elements 18 and 12, where Gallagher discloses the indoor system server, the indoor base station and the subscriber device in communication with each other**), wherein said access network controller is adapted to receive a handover request containing identifier from said core network (**Para 0127, 0128, Fig. 14 step 928, where Gallagher discloses the mobile switching center (MSC) transmitting a handover request to the indoor system server**), to respond to said handover request by assigning a handover reference to said handover request (**Para 0127, 0128, Fig. 14 step 930, where Gallagher discloses the indoor system server acknowledging the hand over request by sending back Handover Request ACK signal to MSC, therefore handover reference**), and to set up a communication path between a mobile station and said core network when a message containing said handover reference is received from said mobile station (**Para 0127, 0128, Fig. 14 steps 936, 940, and 942, where Gallagher discloses the mobile switching center (MSC) issuing a handover**

command to the subscriber device and the subscriber device notifying the indoor system server that the handover is complete).

Gallagher does not explicitly disclose that said common identifier being associated with said access network controller and assigned to all mini-cells connected with said access network controller. Monin discloses that said common identifier (**Para 0066, Fig. 1, where Monin discloses the same identity being used for handover between a plurality of access points, therefore the common identifier**) being associated with said access network controller (**Para 0066, Fig. 1 element 28, where Monin discloses the control unit managing the function of assigning the identity to access points**) and assigned to all mini-cells connected with said access network controller (**Para 0069, Fig. 1 element 26, where Monin discloses the handover procedure between access points using the common identity**).

Therefore it would have been obvious to one of ordinary skills in the art at the time the invention was made to modify Gallagher with the teachings of Monin so as to avoid the handover latencies as discussed in **Para 0015**.

Consider **claim 2**, the combination teaches everything claimed as implemented above (see claim 1). In addition, Monin discloses wherein said plurality of local base stations are adapted to communicate said common identifier to said mobile terminal (**Para 0069, Fig. 1, where Monin discloses that the logical identity of access points i.e. common identity is transparent to the Mobile station**).

Consider **claim 3**, the combination teaches everything claimed as implemented above (see claim 1). In addition, Monin discloses wherein said common identifier

identifies a single cell address (**Para 0066, Fig. 1, where Monin discloses the identity of the serving access point being transferred to one of the neighboring access points**).

Consider **claim 4**, the combination teaches everything claimed as implemented above (see claim 1). In addition, Monin discloses wherein said common identifier identifies a channel frequency utilized by said plurality of local base stations (**Para 0069, where Monin discloses maintaining the same frequency hopping pattern**).

Consider **claim 5**, the combination teaches everything claimed as implemented above (see claim 1). In addition, Monin discloses wherein said common identifier identifies a base station address common to all of said plurality of local base stations (**Para 0066, 0069, where Monin discloses the use of common identity between pluralities of access points**).

Consider **claim 6**, the combination teaches everything claimed as implemented above (see claim 1). In addition, Monin discloses wherein said common identifier is known to said core network (**Para 0066, Fig. 1 element 28, where Monin discloses the control unit managing the function of assigning the identity to access points**).

Consider **claim 7**, the combination teaches everything claimed as implemented above (see claim 1). In addition, Gallagher discloses a broadband network connecting said plurality of local base stations with said access network controller (**Fig. 1, elements 16, 20, 24, and 30**).

Consider **claim 16**, the combination teaches everything claimed as implemented above (see claim 15). In addition, Gallagher discloses said access portion of said public

network receiving said identifier from said mobile station, identifying said access network controller using said identifier (**Para 0128, Fig. 1, where Gallagher discloses the subscriber device notifying the indoor system server that the handover is complete**) and generating said handover request message addressed to said access network controller via said switching control part (**Para 0128, Fig. 1, where Gallagher discloses the MSC notifying the indoor system server that the handover is needed**). Gallagher does not explicitly disclose the common identifier. Monin discloses the common identifier (**Para 0066, where Monin discloses use of same identity**).

Consider **claim 17**, the combination teaches everything claimed as implemented above (see claim 15). In addition, Gallagher discloses said mobile station, upon receipt of said identifier transmitting a report to said portion adapted to trigger handover irrespective of other frequencies received by said mobile station (**Para 0128, Fig. 1, where Gallagher discloses the subscriber device notifying the indoor system server that the handover is complete**). Gallagher does not explicitly disclose the common identifier. Monin discloses the common identifier (**Para 0066, where Monin discloses use of same identity**).

Claim 19, as analyzed with respect to the limitations as discussed in claim 3.

Claim 20, as analyzed with respect to the limitations as discussed in claim 7.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BABAR SARWAR whose telephone number is (571)270-5584. The examiner can normally be reached on MONDAY TO FRIDAY 09:00 A.M -05:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NICK CORSARO can be reached on (571)272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BS/

/BABAR SARWAR/
Examiner, Art Unit 2617

/NICK CORSARO/
Supervisory Patent Examiner, Art Unit 2617